

AN ENVIRONMENTAL GUIDE FOR SOUTH CAROLINA

DRY CLEANERS

AN OVERVIEW OF RULES, PERMITS
AND POLLUTION PREVENTION



ACKNOWLEDGMENT

This guide was adapted from "An Environmental Guide For Texas Dry Cleaners, An Overview of Rules, Permits and Pollution Prevention" prepared by the Small Business Technical Assistance Program of the Texas Natural Resource Conservation Commission. The SCDHEC Small Business Assistance Program appreciates the material contributions of the TNRCC in the development of this manual, and gives particular thanks to Kerry Drake and Tamra Shae-Oatman for their contributions.

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Introduction

● **Why Do I Need This Booklet?**

This booklet is a guide to what South Carolinians in the dry cleaning industry need to know to help protect our environment and comply with state and federal environmental laws. It was produced by the South Department of Health and Environmental Control (DHEC) Small Business Assistance Program (SBAP), an office created to help businesses like yours. You may deal with the SBAP in confidence. The information you share with the SBAP and the questions you ask will NOT be provided to any regulatory or enforcement program of DHEC.

Pollution is one of the nation's primary health and environmental concerns. In South Carolina, a significant amount of pollution is created by small businesses. New state and federal laws are aimed at reducing your contribution to this problem. To comply with these laws, you may need to do more than you are currently doing.

In addition to providing information about environmental laws and regulations, this brochure offers tips about how to reduce or prevent pollution. Using these tips can help you save money. They can also help reduce your emissions to the point where fewer regulations apply to you.

● How Can I Get The Information I Need?

You may find after reading this booklet that you need additional information. If this is the case, please **call us** toll-free at **1-800-819-9001**.

● What Air Pollutants Do Dry Cleaners Emit?

Of the dry cleaning industry it is safe to say "If you can smell it, there are pollutants going into the air." Typically, the dry cleaning process emits what scientists call volatile organic compounds, or VOCs. They also emit perchloroethylene and other contaminants. All these emissions contribute to air pollution.

A few dry cleaning operations still use the "Valclene" system, which employs liquid fluorocarbon 113, or trichlorotrifluoroethane, under pressure as a cleaning solvent. This chemical will be phased out of production in 1996. If you use it you should begin to look for alternatives now.

State Air Regulations

● What Air Regulations Apply To Me?

Any business that generates air pollution must receive authorization from the South Carolina Department of Health and Environmental Control (SCDHEC) to construct or modify its facility and subsequently to operate. This state authorization can take two forms:

Exemption from permitting requirements State Air Permit

Each of these types of authorization will be discussed in detail below. In addition to state authorization, some businesses that emit large amounts of air pollutants also need a federal operating permit. **Most dry cleaners will not require a federal operating permit. For those that might need one, however, federal permit requirements are discussed in a later section starting on page 5.**

The type of authorization you need depends on such things as:
 the amount of solvents and other chemicals you use,
 the amount of air pollution your facility has the potential to generate,
 the quality of the air in the area where your facility is located, and
 the date of the last change you made to your facility.

The type of authorization you need does not depend on any financial aspect of your business, such as volume of business or gross sales.

Read on for more detail about the various types of authorization.

● How Do I Know If I Need A State Air Permit?

You will need a permit to construct or modify your facility and to operate it unless you are eligible to claim that it qualifies for an exemption from the permitting process. These exemptions from permitting are discussed below.

• Do You Have Any Air Permits Now?

If you already have a State Air "Permit to Construct", be sure to read it carefully. Also read the sections of this booklet on page 5, "What If I Plan To Make Changes To My Operation" and "Do I Need a Federal Air Permit?", and the sections on Waste Considerations, page 8, and Pollution Prevention, page 15. If you do not have any permits, read all of the following information.

● Who Can Claim An Exemption From Permitting Requirements?

Dry cleaning businesses may be able to operate under an exemption. The term "exemption" means that a facility may be exempted from the requirement for a state air permit. These businesses must meet a set of conditions. A facility that meets these conditions will not make a significant contribution of air pollutants to the atmosphere and thus does not require a permit.

It is beneficial to most small businesses to meet the conditions for an exemption from state permitting. This type of authorization can be approved far more quickly than a permit. However, the conditions of the exemption are not negotiable; a facility must meet them exactly to qualify. Exemptions simply exempt you from having to obtain a state air permit. More specifically, even if emissions are below state exemption levels, some facilities may be required to obtain a federal permit. Exempted facilities must comply with all federal, state and local air laws and other environmental regulations.

How Do I Claim An Exemption?

If you meet all the conditions of an exemption you may "claim" that exemption. To qualify for the exemption, you must meet these criteria exactly, i.e., your facility's total uncontrolled emissions of volatile organic compounds (the pollutants generally associated with the dry cleaning process) must not exceed 1,000 pounds per month. This is the ceiling that state regulations set for processes emitting this category of contaminant. Read below to see if you are under this limit.

How Do I Know What My Total Yearly Emissions Are?

Petroleum-based Solvents:

Petroleum-based dry cleaning solvents are Volatile Organic Compounds (VOCs). Dry cleaning plants that use petroleum-based solvents are exempt from **state** air permit requirements if they emit no more than 1,000 pounds of VOCs per month. This limit may be reached when a facility uses approximately 150 gallons of these solvents monthly.

If you are a petroleum-solvent dry cleaner emitting more than 1,000 pounds of VOCs per month (using approximately 150 gallons or more of solvent) you may require a state permit to construct and operate your business. For more information, call us at 1-800-819-9001.

Perchloroethylene Solvent:

Perchloroethylene is the other major dry cleaning solvent to be considered in calculating total yearly emissions. "Perc" belongs to a category of chemicals federal law terms Hazardous Air Pollutants (HAPs). To be exempt from **state** permit requirements, a facility can emit no more than 1,000 pounds of this compound per month. This limit will be reached when a facility uses approximately 70 gallons of this solvent monthly. For federal standards refer to page 5.

Perchloroethylene also belongs to a category of chemicals which State Regulations refer to as "Toxic". If a facility emits greater than 16,080 pounds per day, an air dispersion model should be performed to determine if the amount of emitted "perc" at your facility's property line is less than allowable quantities. Some businesses may be eligible for assistance with air modeling from the SBAP. For help in determining if you qualify for assistance in calculating these allowable quantities, please contact the Small Business Assistance Program at **1-800-819-9001**.

If you are a perchloroethylene dry cleaner emitting more than 1,000 pounds of perchloroethylene per month (approximately 70 gallons of perchloroethylene) you may require a state permit to construct and operate your business. For more information, call us at 1-800-819-9001.

For both petroleum-based and perchloroethylene dry cleaners, emissions of 1,000 pounds or less per month may allow the facility to qualify for the dry cleaning exemption. There is one exception to this rule. When a facility on the same premises as the dry cleaning business is already permitted or is in the midst of a permit process, the dry cleaning facility's allowable emissions may be affected by what the permitted facility is emitting.

If you operate a dry cleaning business on the premises of another facility for which you have a permit (or are seeking a permit) and you need information on your dry cleaner's emission limits, call us at 1-800-819-9001.

● **What Happens If I Do Not Meet The Conditions Necessary To Claim An Exemption?**

If you don't meet the conditions of an exemption, you may not claim the exemption unless you modify your facility to meet the conditions. If you cannot modify your facility or operations to meet the conditions, you must obtain a permit. If you would like detailed information about how to modify your facility or how to obtain a permit, **call us at 1-800-819-9001**.

• **What Other Exemptions May Apply To My Business?**

If you do anything other than dry cleaning at your facility, **call us at 1-800-819-9001** and let us help you decide if other permitting requirements exist or if other exemptions might apply to those operations. The following questions concern other operations typically found at dry cleaners. You may have others at your facility.

Do You Have A Storage Tank As Part Of Your Operation?

If your facility includes a solvent storage tank, the tank may be subject to regulation. If you do have a solvent storage tank, **call us at 1-800-819-9001**.

Do You Have A Large Boiler As Part Of Your Operation?

If your facility uses a boiler, it may need an operational permit. Each individual boiler that meets **one** of the two following criteria **may** be exempt from state permitting requirements:

- A boiler that was constructed prior to February 11, 1971 **and** is one of the following:
 - Fueled by natural gas **and** sized at 100 million BTU's per hour (2,250 horsepower) or less.
 - Fueled by oil #6 **and** sized at 5 million BTU's per hour (112 horsepower) or less.

- Fueled by oil #2 **and** sized at 44 million BTU's per hour (990 horsepower) or less
- A boiler sized at 1.5 million BTU's per hour (33.75 horsepower) or less which burns natural gas.

(NOTE: Boiler information should be stamped on the boiler's specification plate or available from the vendor or manufacturer.)

For additional information on exemptions and regulations applicable to boilers, **call us** at **1-800-819-9001**.

● How Do I Get A State Air Permit?

Dry cleaning businesses that do not meet the requirements for an exemption must obtain a state air permit. To get a permit, you must submit an application to the SCDHEC. Your application will then be reviewed by the SCDHEC technical staff. Once it is approved, you will receive your permit. You may then begin to construct or operate your facility. If you meet the requirements for an exemption, it would be beneficial to us if you would submit a request claiming this exemption and explaining the reasons for an exemption. This will enable us to more efficiently track exempted facilities in our data base.

By law you must obtain your permit before you begin to construct or operate your facility. If your facility is already operating without the required authorization, you should seek that authorization now.

● What If I Have More Than One Process In Operation At My Facility?

You may also have other operations going on at your facility. Some dry cleaners also operate a laundry on premises, for instance. Each of these operations must be considered separately for purposes of permitting or qualifying for an exemption.

If you need more information, **call us** at **1-800-819-9001**.

● What Records Do I Need To Keep?

All businesses with a permit or an exemption from the permitting process must keep records that show compliance. Normal business transactions, such as purchase records, usage logs and maintenance schedules are normally sufficient. Some permits and exemptions identify specific records you must keep to verify your compliance.

If you have any questions about what records you should be keeping, **call us** at **1-800-819-9001**.

● What If I Plan To Make Changes To My Operation?

If you plan to change any process, method of operation or equipment, you must first consider if you can still meet all the conditions of your exemption or permit after you make these changes. If you will not, you may trigger the need for a permit or permit amendment. If you need information on how proposed changes might affect your status, **call us** at **1-800-819-9001**.

Do I Need A Federal Air Permit?

As early as 1996, federal air laws will require all businesses defined as "major sources" of air pollutants to obtain a federal operating permit. Major Sources are facilities that emit large amounts of air pollutants or large amounts of substances listed as hazardous air pollutants (HAPs). Petroleum-based solvents are a source of air pollutants and perchloroethylene is a HAP. **Most dry cleaners do not use enough of these solvents to qualify as a "major source" in either category.**

To determine whether or not you are a major source of air pollutants, look closely at your operation. If you have the potential to emit at least 25 tons (7,500 gallons) per year of petroleum-based solvents or at least 10 tons (2,100 gallons for dry-to-dry machines, or 1,800 gallons transfer machines or a combination of both types) per year of perc, you may need to know more about how to calculate the exact amount of emissions that would make you a "major source". Federal operating permit requirements for perc emissions start at just 10 tons per year because perc is a HAP. If you are using these substances in these amounts, **call us at 1-800-819-9001.**

In addition to getting a Federal Operating Permit, a major source may be required by other federal regulations to meet certain control requirements. For example, **perchloroethylene** is subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP). This standard means that perc dry cleaners must use equipment and practices that constitute Maximum Achievable Control Technology (MACT). This MACT requires that perc dry cleaning machines have specified control devices installed, and that perc dry cleaners operate in compliance with special rules. If your business operates dry-to-dry machines and consumes more than 2,100 gallons of perchloroethylene per year, or uses transfer machines or a combination of both and consumes more than 1,800 gallons of perc per year, your facility would be considered a "major source".

The EPA also separates the smaller, "area" sources into two categories, with different requirements pertaining to each. Please refer to the following table for a requirement summary.

If you use perc, you must be registered with the EPA. If you need materials or information on this requirement, **call us at 1-800-819-9001.**

The federal New Source Performance Standard, subpart JJJ, for **petroleum** dry cleaners covers standards of performance and test requirements for cleaners with a total manufacturers' rated dryer capacity of greater than 84 pounds. If you need further information on this requirement, please **call us at 1-800-819-9001.**

Summary Of Requirements Of The Perc Dry Cleaning NESHAP

Requirement	Small Area Source	Large Area Source	Major Source
<u>Applicability:</u> Dry Cleaning Facilities with: (1) Only Dry-to-Dry Machines (2) Only Transfer Machines (3) Both Dry-to-Dry and Transfer Machines	Consuming less than: 140 gallons perc/year 200 gallons perc/year 140 gallons perc/year	Consuming equal to or between: 140-2,100 gallons perc/year 200-1,800 gallons perc/year 140-1,800 gallons perc/year	Consuming more than: 2,100 gallons perc/year 1,800 gallons perc/year 1,800 gallons perc/year
<u>Process Vent Controls:</u> Existing Facilities	None	Refrigerated condenser (or equivalent) Carbon absorbers installed on existing machines before 9/22/93 can remain	
New Facilities	Refrigerated condenser (or equivalent)		Refrigerated condenser and small carbon absorber (or equivalent)
<u>Fugitive Controls:</u> Existing Facilities	- Leak detection/repair - Store all perc solvent & waste in sealed containers		Transfer machine systems are contained inside a room enclosure
New	- Leak detection/repair - Store all perc solvent & waste in sealed containers - No new transfer machine systems allowed		
<u>Monitoring:</u>	New: Same as large area source Existing: None	Refrigerated condenser (RC): Measure the RC outlet temperature at the end of the cycle on a dry-to-dry machine or dryer. (Needs to be less than or equal to 45 degrees F.) Measure the RC inlet and outlet temperature difference on a washer. (Needs to be greater or equal to 20 degrees F.) Carbon absorber (CA): Measure the perc concentration out of the CA with a colorimetric detector tube. (Needs to be less than or equal to 100 ppm.)	
<u>Operation/Maintenance:</u>	Operate and maintain dry cleaning systems according to manufacturer's specifications and recommendations.		
<u>Records:</u>	Each facility must maintain records of perc purchases and the calculation of yearly perc consumption each month, along with dated records of all monitoring and leak detection and repair activities. The last five years records must be kept.		
<u>Reporting & Compliance:</u> Existing Facilities	Each facility must submit an initial report by December 20, 1993 and compliance report by January 19, 1994. Reports must be certified by a responsible official. Each facility also has until December 20, 1993 to comply with pollution prevention and record keeping requirements. Large Area and Major facilities must comply with process controls by September 23, 1996 and must submit an additional compliance report by October 22, 1996.		
New Facilities	All other new facilities must comply upon start-up with all requirements and submit a compliance report within 30 days from the date the dry cleaner must be in compliance. However, there are special compliance and notification requirements for dry cleaning systems that were constructed during December 9, 1991 and September 21, 1993.		

Waste Considerations

● How Do I Handle Waste Chemicals?

The following sections will explain the steps for proper waste management. By following these procedures, you'll ensure that your business complies with federal and state hazardous waste laws. The information below will help you answer two basic questions: 1.) Does my business generate hazardous waste? and 2.) If so, how much hazardous waste does it generate per month? The answers to these questions will tell you what requirements apply to you.

● Do I Generate Hazardous Waste?

The term "hazardous" means more than just toxic or dangerous to our health. It also refers to specific kinds of waste defined as hazardous by the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC). Hazardous wastes are regulated by both the EPA and the SCDHEC, so it is important for a business to know which of its wastes are hazardous.

A facility (which can be one person or a company of any size) that produces hazardous waste is called a hazardous waste "generator". The law holds the generator responsible for determining whether or not waste generated at his or her facility is hazardous. Before you can determine if your facility generates hazardous waste, you must first know what a "waste" is. A **waste** is any solid, liquid, or contained gas that you no longer use, and that you either recycle, throw away, or store until you have enough for treatment or disposal. A **hazardous waste** is any waste that has one or more physical "characteristics" defined in the law as hazardous or that is "listed" as a hazardous waste in the EPA and state regulations.

What Are Listed Wastes?

Many wastes from specific processes are "listed" as hazardous by the EPA or state. If your waste appears on one of these lists, or is mixed with any of the wastes on these lists, it is hazardous. These wastes are often referred to by their list of origin. "F" listed wastes are from non-specific sources; "K" listed wastes are from specific sources; "P" listed wastes are acutely hazardous and "U" listed are toxic. Most hazardous wastes from a dry cleaning plant are not "listed". Perc-contaminated wastes, however, are F listed hazardous wastes. This includes used perc solvent, and anything mixed with or derived from this used solvent, such as used carbon filter cartridges, "muck" or spotting board residue.

Note: many of the wastes on these lists refer to chemicals which are discarded, unused or stored indefinitely. While you may have any of these chemicals at your facility, they are not considered hazardous wastes if you plan to use them for their intended purpose. Examples are solvents such as perchloroethylene, acetone and methylene chloride which are "listed" hazardous wastes. Anything mixed with or derived from these solvents, such as used carbon filter cartridges, "muck" or spotting board residues, also becomes a listed hazardous waste.

The EPA and SCDHEC lists "P" and "U" wastes which are commonly considered "acutely" hazardous or toxic wastes such as sodium cyanide, strychnine, and some pesticides. These are not typical dry cleaning wastes. If, however, you have any unusual compounds or wastes at your facility that you intend to dispose of or store, you must make a hazardous waste determination on these items along with routine wastes. To obtain a description of listed wastes, **call us at 1-800-819-9001**.

What Are Characteristically Hazardous Wastes?

EPA and SCDHEC considers a waste "characteristically hazardous" if it has one or more of the following characteristics: **ignitability, reactivity, corrosivity, or toxicity**. Examples are solvents with a flash point less than 140°F, acids, bases and mixtures containing these wastes. To obtain a description of characteristic wastes, **call us at 1-800-819-9001**.

How Do I Make A Hazardous Waste Determination?

A waste can be both listed and characteristic at the same time. The distinctions between listed and characteristic are important to you, the generator, only for purposes of identifying the waste, determining how the waste will be disposed of and assigning "waste codes" which are defined in this section. The generator is responsible for examining each waste generated at the facility and determining if the waste is hazardous or not.

Although hazardous waste determinations require some effort (and possibly expense), you only have to do this once. You do not have to make another hazardous waste determination unless you generate a new waste or unless the nature of your current wastes changes. A waste may change if the process or chemicals that created it change. A hazardous waste determination is done in one of two ways:

- 1) Use your knowledge of the waste and what went into it to compare the waste to the lists and characteristics. This method is called "process knowledge" and you may use any information you have about the waste including product labels, Material Safety Data Sheets (MSDS), etc.
- 2) Arrange for a lab to analyze the waste to determine whether it is hazardous or not.

Do Dry Cleaners Generate Hazardous Waste?

Dry cleaners typically do generate hazardous wastes, both characteristic and listed. Examples of these wastes are:

- Perchloroethylene solvent¹ and all related wastes including:
 - solvent sludges ("muck"),
 - still bottoms from solvent distillation,
 - used filter cartridges,
 - diatomaceous/carbon filter powder,
 - spotting board residues.
- Any ignitable solvent¹ with a flash point less than 140°F (see the Material Safety Data Sheet, or MSDS, for flash point). This may include petroleum solvents.
- Distillation residues with a flash point less than 140°F. This may include residues from petroleum solvents.
- Any waste that is contaminated with an ignitable solvent. Such waste may also be ignitable, and would therefore be hazardous. This would include used filter cartridges, used rags, muck, etc.

¹ These solvents are normally recycled. However, they are still considered wastes for the purposes of hazardous waste determinations and if they are to be disposed of, they are subject to all applicable laws.

● What Is My Generator Status?

Once you have determined that you generate a hazardous waste, the next step is to determine how much you generate each month. The amount you produce determines your "Generator Status", which in turn governs which notification and reporting requirements apply to you.

There are three types of hazardous waste generators: Conditionally Exempt Small Quantity Generators (CESQG), Small Quantity Generators (SQG), and Large Quantity Generators (LQG).

In general, nonindustrial CESQGs do not have to notify a regulatory agency (EPA or SCDHEC) or report their waste activity. **Many dry cleaners will fall into this category. Both Small Quantity Generators and Large Quantity Generators must report to SCDHEC.**

What Is A Conditionally Exempt Small Quantity Generator?

Conditionally Exempt Small Quantity Generators (CESQGs) generate no more than 100 kilograms of hazardous waste per month (220 pounds²). Additionally, a CESQG must generate no more than 1 kilogram (1 quart) of "acutely" hazardous waste per month³.

What Is A Small Quantity Generator?

Small Quantity Generators (SQGs) generate between 100 kilograms and 1,000 kilograms of hazardous waste per month. This is the same as generating between 220 pounds and 2,200 pounds per month². Additionally, no more than 1 kilogram (1 quart) of "acutely" hazardous waste may be generated per month³.

What Is A Large Quantity Generator?

Large Quantity Generators (LQGs) generate 1,000 kilograms or more of hazardous waste per month (2,200 pounds or greater²). Also, if more than one kilogram (one quart) of "acutely" hazardous waste is generated per month, Large Quantity Generator status will apply³.

² The volume of liquid that is equivalent to a particular weight varies depending on the density of the liquid. For perchloroethylene, there is approximately 742 pounds of solvent in one 55 gallon drum. For petroleum based solvents, there is approximately 357 pounds of solvent in one 55 gallon drum.

³ If more than one kilogram (one quart) of "acutely" hazardous waste is generated in **any** month, Large Quantity Generator status will apply to all hazardous wastes from the entire facility for that month.

How Much Waste Can I Store At My Facility?

- If you are a Conditionally Exempt Small Quantity Generator you may store up to 1,000 kilograms (2,200 pounds⁴) on-site for an unlimited amount of time.
- If you are a Small Quantity Generator you may store up to 6,000 kilograms (13,200 pounds⁴) on-site for up to 180 days.
- If you are a Large Quantity Generator you may store any amount of waste on-site, but you must have a registered hazardous waste transporter dispose of it within 90 days from the initial date of storage.

⁴ For perchloroethylene, there is approximately 742 pounds of solvent in one 55 gallon drum. For petroleum based solvents, there is approximately 357 pounds of solvent in one 55 gallon drum.

Who Do I Have To Notify About My Waste?

If you determine, based on the amount of hazardous waste you generate per month, that you are a Conditionally Exempt Small Quantity Generator, you are exempt from notification requirements provided you do not store more than 1,000 kilograms (2,200 pounds) on site at any one time. If, however, you are a Small or Large Quantity Generator, you must notify the South Carolina Department of Health and Environmental Control of all your hazardous wastes. Notification involves filling out specific forms and assigning "waste codes" to each hazardous waste you produce. Waste codes are 4-digit numbers that physically describe the waste. The codes are used by SCDHEC, disposal facilities, transporters, and you, the generator, to track and identify the wastes. Once you notify the SCDHEC of your generator status, you will receive an identification number in return.

For specific instructions on notification and waste codes, **call us at 1-800-819-9001.**

What Records Should I Keep?

If you are a Conditionally Exempt Small Quantity Generator you need only keep records sufficient to verify your status; you should also keep any documents (MSDS, product labels) that you used to make your hazardous waste determinations. If you are a Small or Large Quantity Generator you should keep a copy of the notice of identification on file. You should also keep copies of the Uniform Hazardous Waste Manifest provided by your permitted hazardous waste hauler (transporter) and, when you ship your wastes, copies of quarterly reports and exception reports. If you have any questions, **call us at 1-800-819-9001.**

The following table summarizes the differences between CESQG, SQG, and LQG that are applicable to dry cleaners.

Summary Of Generator Status Requirements

Generator Status	Amount of Hazardous Waste per Month	Amount Acutely Hazardous Waste per month	Amount of Hazardous Waste Stored On-Site & Time Allowed	Do I Notify SCDHEC?
CESQG	100 kg or less (220 lbs. ⁵)	1 kg or less (1 qt.)	1,000 kg or less for any length of time	NO
SQG	Between 100 and 1,000 kg (2,200 lbs. ⁵)	1 kg or less (1 qt.)	6,000 kg or less for up to 180 days	YES
LQG	1,000 kg or more (2,200 lbs. ⁵)	More than 1 kg. (1 qt.)	Any amount for up to 90 days	YES

⁵ For perchloroethylene, there is approximately 742 pounds of solvent in one 55 gallon drum. For petroleum based solvents, there is approximately 357 pounds of solvent in one 55 gallon drum.

● How Do I Store And Dispose Of Hazardous Waste?

How Should I Store My Hazardous Waste

Regardless of how much hazardous waste you are allowed to store on-site, you must comply with certain storage laws relating to the containers and physical conditions of the wastes. The purpose of these "container rules" is to ensure maximum safety for your staff and to protect the environment surrounding the wastes. Wastes may be accumulated in 55-gallon drums, tanks, or other containers suitable for the type of waste to be accumulated. The guidelines for hazardous waste accumulation are:

- Clearly label each container with the words "Hazardous Waste - State and Federal laws prohibit improper storage or disposal," the date accumulation began and the contents.
- Keep containers in good condition and do not allow leakage, corrosion, or rupture.
- Inspect containers weekly for corrosion, leakage, and bulging.

- Keep containers closed except when filling or emptying them.
- Make sure that if you are storing ignitable or reactive wastes, containers are placed as far as possible from your property line (at least 50 feet).
- Never store different wastes in the same container that could react together to cause fires, leaks, or gaseous releases.

How Do I Dispose Of Hazardous Waste?

Do **not** dispose of hazardous waste yourself on any property unless you have a hazardous waste permit allowing you to do so. To ensure that your hazardous waste is properly disposed of, you must choose a permitted hazardous waste transporter (who will haul the waste) and a permitted hazardous waste management facility (which will treat or dispose of it). Many companies provide both services to generators. The most important things you should remember about having your waste shipped off-site for disposal are:

- Choose a transporter that has a hazardous waste transporter permit.
- Choose a facility that has a hazardous waste permit.
- Package and label your wastes properly for shipping as required by the SC hazardous waste management regulations **R.61-79.262 Subpart C**. Your transporter should be able to assist you. **If you have questions, call us at 1-800-819-9001.**
- Complete the EPA form titled "Uniform Hazardous Waste Manifest" which must accompany the waste shipment from your facility to disposal. Use of this form is called "manifesting" your waste.
- As required by the SC hazardous waste management regulations in **R.61-79.262.35**, an Authorization Request Form (AFR) must be completed and approval received from the disposal facility prior to shipment and disposal of a hazardous waste.

NOTE: If you are a conditionally exempt quantity generator, you are not required to complete a Uniform Hazardous Waste Manifest; your permitted transporter should be able to assist you with this. If a SCDHEC identification number is required, you may insert the letters "CESQG" in the appropriate spaces on the manifest in lieu of a identification number. This is sufficient for a conditionally exempt small quantity generator.

● Do I Need A Hazardous Waste Permit?

Most dry cleaners do **not** need Hazardous Waste permits. Permits are issued primarily to Treatment, Storage, and Disposal facilities, not to individual generators. If you are a Small Quantity Generator or a Large Quantity Generator you may need an identification number to produce the waste, but not a permit. A "permit" is a mechanism for a facility to manage hazardous waste in an appropriate manner, pursuant to all applicable South Carolina Hazardous Waste Management Regulations.

You do not need a hazardous waste permit unless you do one of the following:

- store your waste longer than your generator status allows;
- treat your waste in an attempt to remove or reduce its hazardous characteristic; or
- dispose of your waste on your facility's property. Disposal includes burying, and dumping.

Note: Heating dry cleaning muck to remove the perchloroethylene and collecting the condensed liquid for recycling may not require any type of hazardous waste permit. To obtain information on hazardous waste permits, call us at 1-800-819-9001.

● What Should I Do With My Dirty Water?

Any water waste that your business generates is a waste. This includes water from washing equipment, water contaminated with solvents, or any other water that is an end result of some process. As stated earlier, you must make a hazardous waste determination on all of your wastes using one or more of the three methods described. If a water waste is found to be hazardous, you must follow the procedures for properly managing hazardous wastes. If a water waste is found to be nonhazardous, it can be discarded into the sewers, provided your municipal wastewater treatment plant has approved this practice.

Do not dump any wastes into any drains or sewer systems unless you have first contacted the municipal wastewater treatment plant and obtained authorization to do so. Some wastes are harmful to the collection system and the treatment plant. Some are not treatable, or may be harmful to people working on the system or at the plant.

● Do I Need A Wastewater Permit?

A wastewater NPDES permit gives a business permission to discharge wastewater outside a municipal sewage system, i.e. to discharge it into a ditch, pond, lake, creek, river or other waterway. Most dry cleaners do not handle their wastewater this way; they discharge it into municipal sewage pipes. Anyone who discharges wastewater into anything other than a municipal sewage system must have a permit to do so from SCDHEC. For additional information regarding waste water discharge and how you can comply with the laws affecting you, **call us at 1-800-819-9001.**

Compliance With The Laws And Regulations

● What If I Am In Violation Of The Laws Or Regulations?

If you discover that you have violated the law or a regulation in the past or that you are not currently in compliance, you should notify the SCDHEC as soon as possible. It is always better to report your own violations than to be the subject of a complaint or to have violations discovered during a SCDHEC inspection. Often small businesses will not face fines or sanctions for their first violation if they make a good faith effort to report problems promptly and if they work out a plan with the SCDHEC to correct the problem. For **confidential** assistance, **call us at 1-800-819-9001.**

Pollution Prevention

● How Can I Prevent Pollution?

Do Dry Cleaners Pollute?

Many steps in the dry cleaning process can cause pollution. Petroleum solvents, perchloroethylene and special spotting compounds can all emit air pollutants. Still bottom residues, spotting board residues, and contaminated waste water can also cause pollution.

What Does Pollution Prevention Mean?

Pollution prevention is the practice of preventing or reducing pollution at the source whenever possible. By "reducing at the source" (also called "source reduction") we mean limiting or stopping pollutants before they go into the environment.

Why Should I Be Interested In Preventing Pollution?

By preventing pollution at its source, you can substantially lower your costs for materials and pollution controls and reduce your liability exposure. At the same time you will reduce risks to your workers' health and safety.

Pollution prevention practices should also help you lower your overall administrative costs, because in general, the less pollution you generate the fewer regulations apply to you and the less time you'll spend dealing with the government.

Finally, small businesses should be interested in pollution prevention because the state's **Waste Reduction Policy Act** requires that all small quantity hazardous waste generators (SQGs) have a source reduction and waste minimization plan in place by January 1, 1997. Large Quantity Generators (LQGs) are already required to have such plans in place.

● How Do I Develop A Pollution Prevention Plan For My Business?

By asking the question, you have taken the first step toward creating a pollution-prevention awareness in your business. This awareness is key to building a pollution prevention plan. The following pointers may help.

1. Identify and evaluate your sources of pollution.
2. Look at short-term and long-term options for pollution prevention. The usefulness of any pollution prevention option will depend on its cost, the degree of environmental hazard the pollutant poses, the potential liability the pollutant represents and your ability to finance improvements.
3. Calculate your current costs for controlling or managing pollutants from each source and compare them with costs to reduce or prevent pollution from those sources. By linking prevention costs to the source of pollution, rather than treating these costs as overhead, you can pinpoint which prevention measures will make the most economic sense.
4. Implement pollution prevention measures that will yield the greatest benefit. Include practices that eliminate the most hazardous pollutants, that reduce the overall amount of pollutants or that reduce or eliminate the pollutants that are the most expensive to manage.
5. Develop record keeping and follow-up procedures to track the effectiveness of your plan. Good records of your progress will enable you to share news of your success with the community (your customers) and to recognize employees who have contributed to the prevention effort. Good record keeping will also prepare you to respond to any reporting requirements of state and federal agencies.
6. Re-assess your operations periodically to identify new opportunities to prevent materials from becoming pollutants. These may include recycling, substituting raw materials or making process or equipment changes.
7. Evaluate the effectiveness of your pollution prevention plan by conducting a periodic review of its results.

As you develop a pollution prevention plan for your business, remember:

- Pollution prevention starts at the top with **you**, the small business owner or manager. Your example will set the tone for your employees. If you are enthusiastic, they will be too.
- Your employees will probably be your best resources for preventing pollution. Educate your people about your goals and then brainstorm for ideas on how to reduce or eliminate sources of pollution.
- This will be a continuous process.

● **What Are Some Suggested Pollution Prevention Practices?**

Consider adopting these as part of your regular business practices. They can help reduce operating and waste-disposal costs and reduce your long-term liability.

Good Operating Practices

- Follow a strict maintenance schedule. Maintenance is cheaper than repairs.
- Keep storage areas clean and well organized. It will help you to spot leaks quickly, before they mix with other wastes.
- Clean your lint screens regularly. You'll save on electric bills and repair costs.

Inventory Control

- Buy only what you need. Surplus solvents and spotting compounds lead to high waste-disposal costs.
- Organize your shelves so that old materials are used first. Unused materials become waste that can cost you money.

Spill and Leak Prevention

These procedures are required by EPA for perc users but they are good business practices for everyone. They'll make machines last longer, have fewer problems, and cost less to operate in the long run.

- Check hoses, coupling, pumps, valves and gaskets frequently in order to detect leaks. Make repairs promptly.
- Take special care when handling your cleaning materials to prevent spills. You'll avoid costly clean up.
- Know how much solvent your machine normally uses. If solvent use suddenly increases, find out why. Not knowing the answer may be costly (machine repairs, hazardous waste clean up).
- Keep all containers covered to prevent evaporation and spillage.
- Provide secondary containment in areas where solvents are stored. Small leaks will not become more costly spills.

Raw Material Management

- Look for damaged containers and leaks when materials are delivered. You don't want to pay for someone else's carelessness.

Process Modifications

- Size garment loads correctly. Your machine will operate at top efficiency with the correct size load. Too large a load reduces the effectiveness of solvent recovery equipment; too small a load is inefficient.
- Use pumps and hoses when dispensing new materials and funnels when transferring wastes to storage containers. Use of these tools will reduce the possibility of spills.
- Consider installing additional carbon adsorption or refrigeration units to recover valuable solvent.
- Extract solvent from filters as thoroughly as possible. Gravity drainage and "cooking" are common techniques that can save you money.
 - Replace disposable items with reusable ones. For example, environmentally conscious customers can buy reusable nylon bags to hold and transport their dirty clothes. After being cleaned, the clothes are hung on hangers and covered with the nylon bag (cleaned for free) rather than plastic.

Recycling

- Buy materials from vendors that recycle or reuse containers.
- Keep each waste in a separate container for recycling.
- Do not allow nonhazardous waste to become contaminated with hazardous waste. If it does, the nonhazardous waste must be disposed of as hazardous waste, which is very costly.
- Use on-site recovery techniques like distillation to make solvents reusable.
- If the solvents cannot be made reusable, try to find a way to recycle them. Or, purchase solvents from a company that will pick up and recycle the spent solvent.
- Encourage customers to bring back hangers that they don't need.
- Don't staple receipts to plastic bags. It makes them harder to recycle. Instead, attach the receipt to the hanger.

Pollution Prevention Summary Guide For Dry Cleaning

Dry Cleaning Processes	Emissions & Wastes	Pollution Prevention Solutions	Notes
Dry-to-Dry Perchloroethylene (Perc)	Emissions: hazardous air pollutants (HAPs) Wastes: rags, carbon beds, liquid solvent, distillation residues, carbon & paper filters.**	Monitor equipment efficiently on a regular basis to detect leaks.*	"Equipment efficiency" means pounds of clothes cleaned per gallon of solvent.*
Transfer Perchloroethylene (Perc)	Emissions: hazardous air pollutants (HAPs) Wastes: liquid solvent, distillation residues, carbon & paper filters.**	Size garment loads correctly. Overloading reduces the effectiveness of solvent recovery equipment.	Under loading makes less efficient use of solvent. Keep all containers covered.
Dry-to-Dry & Transfer Perchloroethylene (Perc) Compliance for Pollution Prevention	Emissions: hazardous air pollutants (HAPs) Wastes: rags, liquid solvent, distillation residues, carbon & paper filter.**	Inspect equipment regularly. Repair leaks promptly, within required time limit. Install repair parts within five working days. Keep a log of leak inspections.*	Practice good house-keeping. Operate and maintain equipment to manufacturers' specifications. Keep a log of Perc purchased. Keep manuals on site.*
Dry-to-Dry Petroleum Solvents (Stoddard, quick dry, or low odor)	Emissions: volatile organic compounds (VOCs) Wastes: rags, solvents, distillation residues, carbon & paper filter cartridges, trash, lint, dust, unused chemicals.**	Check hoses, couplings, pumps, valves and gaskets frequently to detect leaks. Make repairs promptly.	Keep all containers covered to prevent evaporation and spillage.
Transfer Petroleum Solvents (Stoddard, quick dry, or low odor)	Emissions: volatile organic compounds (VOCs) Wastes: solvents, distillation residues, carbon & paper filter cartridges, trash, lint, dust, unused chemicals.**	Use spigots and pumps when dispensing new materials and funnels when transferring wastes to storage containers.	If the solvent cannot be made reusable, try to recycle it. Purchase solvents from a company that will pick up and recycle. Keep containers covered.
Equipment Cleaning	Emissions: volatile organic compounds (VOCs) Waste: rags, spent solvent, empty solvent containers, spent filter cartridges, cooked powder residue, still residues.**	Use on-site recovery techniques to make solvents reusable. Drain solvent thoroughly from filters.**	Keep storage and work areas clean, well organized, and keep containers labeled.

Drycleaning Facility Restoration Fund

In 1995, the South Carolina General Assembly passed a bill to amend title 44, chapter 56, code of laws of South Carolina, 1976, relating to hazardous waste, by adding article 4 so as to provide for drycleaning facility discharge rehabilitation, to create the drycleaning facility restoration trust fund and provide for its uses, to establish procedures for receiving site rehabilitation funds, to require drycleaning facilities to register and pay fees, to establish surcharges for conducting a drycleaning business or for producing or importing drycleaning solvents, and to establish the drycleaning advisory council and to provide for its membership and duties.

If you has any questions pertaining to this and any other **drycleaning legislation**, call us at **1-800-819-9001**.